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(71) Applicant (for all designated States except US): INTERFACE, INC. [US/US]; 2859 Paces Ferry Road, Suite 2000, Atlanta, GA 30339 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BERARD, Raymond, A. [US/US]; 575 Chastain Road, NW, Kennesaw, GA 30144 (US). HENSLER, Connie, D. [US/US]; 3255 Colquitt Trail, Kennesaw, GA 30152 (US).

(74) Agents: PRATT, John, S. et al.; Kilpatrick Stockton LLP, Suite 2800, 1100 Peachtree Street, Atlanta, GA 30309 (US).

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(54) Title: CHEMICAL COMPOUNDS AND METHODS FOR REMOVING DYE

(57) Abstract: Chemical compounds and methods for removing dye from polyester fibers, in particular poly(ethylene terephthalate) ("PET") fibers, is disclosed. The compounds and methods are particularly useful for removing dye from panel fabric made from recycled PET fibers. The method involves contacting the PET with a dye removal compound in a sealable vessel. The contents of the vessel are agitated and heated to achieve an increase in pressure and temperature. Following a cooling down period, the PET is removed and rinsed with water. The dye removal compound includes an aqueous solution of at least one leveling agent.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/03046

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : D06L 3/00; C09B 67/00
US CL : 8/ 102, 137.5, 527

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 8/ 102, 137.5, 527

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST - decolor\$ remov\$ dye and (ethylene terephthalate) and polyester

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,972,038 (AMESTICA et al.) 26 October 1999 (26.10.1999), abstract, columns 3-25.	1-55
Y	US 6,048,367 (DAMHUS et al.) 11 April 2000 (11.04.2000), abstract, columns 2-8.	1-55
X	US 4,722,738 (WILSON et al.) 02 February 1988 (02.02.1988), abstract, columns 2-12.	1-55

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Faxsimile No. (703)305-3230

Authorized officer

Yogendra N. Gupta
Telephone No. 703-872-9309